

AMENDMENTS TO THE SPECIFICATION

Insert the Sequence Listing submitted with the concurrently filed reply to the Notice to Comply with Sequence Requirements at the end of the specification.

Amend the paragraph beginning at page 15, line 25, of the English language translation of the application as follows:

A mutation screening was carried out as previously described (1), but direct sequencing was used instead of single strand conformation analysis (SSCA). For verification of the mutation, for analysis of the complete ADNFLE family and for screening the control sample a PCR restriction fragment length assay was developed using the primer n24942 (5' GGCGAGTGGGTCATCGTGG; (SEQ ID NO:1)) and N54624 (5' GCTCGGGCCAGAAGCGCGG; SEQ ID NO:2). A standard PCR was performed using a buffer containing 2,0 mM MgCl₂ and 5% DMSO; an annealing temperature of 64.3°C and an extension time of 45 seconds were chosen. 5 µl of the resulting PCR product were treated with 4 U TaqI (Roche Molecular Biochemicals) for 7.5 hours at 65 °C. Subsequently, 7 µl of the restricted PCR product were run on a 10% polyacrylamide gel (15V/cm) for 2 to 3 hours. After the electrophoresis the bands were visualized using a standard silver staining protocol. The TagI restriction digest yielded the following pattern: wild type allele 42bp + 497bp; mutated allele, 42bp + 260 + 237 bp (Fig. 2A).

Amend the paragraph beginning at page 16, line 8, of the English language translation of the application as follows:

The expression vector pSV2-ZEO (Invitrogen) containing the CHRNA4 wild type sequence was used for *in vitro* mutagenesis. The expression clone CHRNA4-T265I was constructed with the QuikChange Mutagenesis-Kit (Stratagene) according to the manufacturer's instructions using the following primers:

n1554 5'-

- GTCTTCCTGCTGCTCATCATCGAGATCATCCCGTCCACC (SEQ ID NO:3) and

- n1594, 5'-

GGTGGACGGGATGATCTCGATGATGAGCAGCAGGAAGAC (SEQ ID NO:4).

Single colonies were screened by the TagI restriction assay described above and positive clones were sequenced for verification.